EVERETT AND ASSOCIATES
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8 April 2009

Sharon Thornton
Wynn Engineering
27315 Valley Center Road
Valley Center, Ca 92082

Re: Revisions to Biological Resources Report, Redding Minor Subdivision, TPM 21112

Dear Sharon,

As requested in the County of San Diego scoping letter of February 2, 2009, the following are specific responses to items regarding biological issues as provided in the project issue checklist:

Item #

2.017 - A discussion of large mammal use of the site is provided on page 6 of the Revised Report. In addition, two Figures (6 and 7) have been added to clarify this issue.

2.018 - A section has been added to the Revised Report to address Jurisdictional Wetlands and Waterways. This section can be found on pages 7 and 8.

2.019 - A section entitled Other Unique Features / Resources has been added to the Revised Report. This section can be found on page 6.

2.020 - A discussion of native wildlife nursery sites has been added to the Revised Report. It can be found on page 7.

If you have any questions at all, please call me at your convenience.

Sincerely,

William T. Everett

California Native Species Field Survey Form

Mail to:
Natural Diversity Database
California Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95814

For Office Use Only
Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Date of Field Work: 07 (month (mm)) - 16 (date (dd)) - 2009 (year (yyyy))

Scientific Name: Cathartes aura

Common Name: Turkey Vulture

Species Found? [X] yes [ ] no If not, why? _____

Total No. Individuals 1 Subsequent Visit? [ ] yes [X] no

Is this an existing NDDB occurrence? _____ [X] no [ ] unk. Yes, Occ. #

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: W.T. EVERETT
Address: P.O. BOX 1085
LA JOLLA, CA 92038

Email Address: everette esrc.org
Phone: (858) 456-2990

Plant Information

Phenology: _____ % vegetative _____ % flowering _____ % fruiting

Animal Information

Age Structure: ONE # adults _____ # juveniles _____ # unknown

[ ] breeding [ ] wintering [ ] burrow site [ ] rookery [ ] nesting [ ] other

Location ***(please also attach or draw map on back)***

County: SAN DIEGO Landowner / Mgr.: JANE REDDING

Quad Name: ESCONDIDO Elevation: 500 ft.

T N/A R _____ _____ 1/4 of _____ 1/4 of Section _____ T _____ R _____ _____ 1/4 of _____ 1/4 of Section _____

UTM: Zone: 11 (10, 11) Datum: NAD 83 (NAD83, NAD27, WGS84, other)

Source: USGS 7.5 (GPS, map & type, etc.) Point Accuracy: 50 Meters

UTM Coordinates 495779 m E 3660401 m N

Habitat Description *(plant communities, dominants, associates, substrates/soils, aspects/slope)*

DISTURBED NON-NATIVE GRASSLAND, HERBACEOUS WEEDS

Other rare species? RED-SHOULDERED HAWK - Buteo lineatus

Site Information Overall site quality: [ ] Excellent [ ] Good [ ] Fair [X] Poor

Current / surrounding land use: RUDERAL; SURROUNDED BY EXISTING DEVELOPMENT

Visible disturbances / possible threats: SLATED FOR DEVELOPMENT IN NEAR FUTURE

Comments: CLEARLY A MIGRATORY BIRD

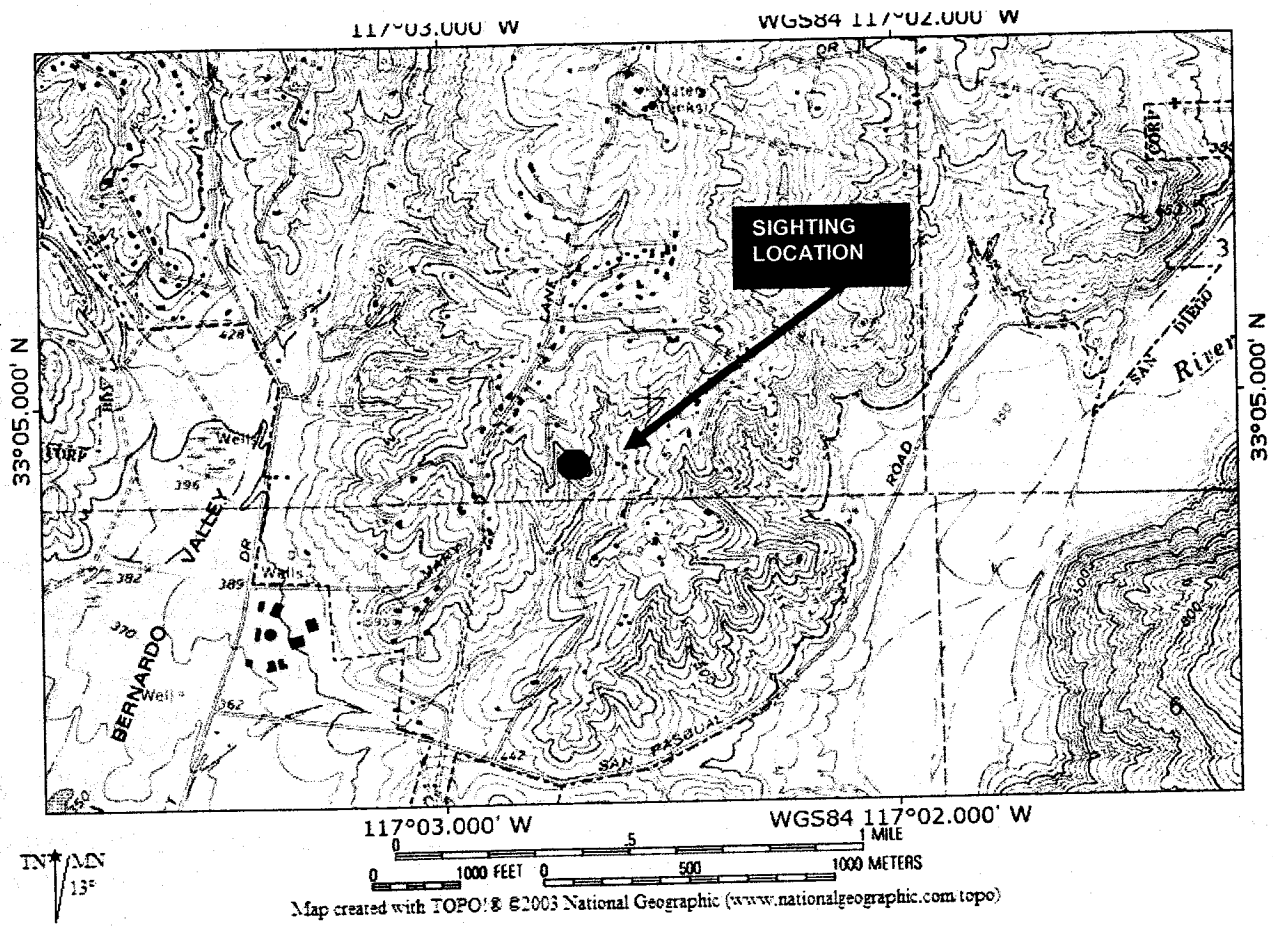
Determination: *(check one or more, and fill in blanks)*

- [ ] Keyed (cite reference): _____
- [ ] Compared with specimen housed at: _____
- [ ] Compared with photo / drawing in: _____
- [ ] By another person (name): _____
- [X] Other: EXTENSIVE EXPERIANCE W/SPECIES

Photographs: *(check one or more)*

	Slide	Print
Plant / animal	[ ]	[ ]
Habitat	[ ]	[ ]
Diagnostic feature	[ ]	[ ]

May we obtain duplicates at our expense? [ ] yes [ ] no



Map created with TOPO!® ©2003 National Geographic (www.nationalgeographic.com/topo)

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3 April 2009

Jane Redding
13490 Wildcat Way
Prescott Valley, AZ 86314

BIOLOGICAL RESOURCES LETTER REPORT

Project Name: Redding Project - TPM 21112, ER 07-08-019

Dear Jane,

I have prepared the following letter report at your request in response to the scoping letters from County staff dated March 14, 2008 and February 7, 2009.

The Redding Project (see Figures and accompanying Biological Resources Map) encompasses 10.11 gross acres (APN 239-360-08), in an unincorporated area of San Diego County situated near the southern portion of the City of Escondido. The project proposes to subdivide the parcel into three lots ranging in size from 2.7 to 4.02 gross acres.

PROJECT LOCATION AND SETTING

The project site is located at the end of Puebla Street, east of Mary Lane, Bear Valley Parkway and Interstate 15, and north of San Pasqual Road (Figures 1 and 2). The approximate USGS coordinates of the site are 33°05'N, 117°03'W as determined on-site by Global Positioning System (GPS) receiver (Escondido 7.5 minute series quadrangle, see Figure 3). The elevation of the site ranges from 500 to 575 feet. The property is entirely surrounded by developed, low density residential parcels similar in size and nature to those proposed (Figures 4 and 5). No intact native vegetation communities occur on, adjacent, or near to the project site.

METHODS

To conduct an assessment of biological resources, I visited the project site on 16 July 2008. The conditions for observation during the visit were excellent, with no cloud cover, no impediments to visibility, temperatures in the mid 80s, and 3-6 knots SW wind. The visit lasted from approximately 1400 to 1630. During my visit, I was able to examine the entire project site and adjacent areas. My observations on-site were recorded as they were made, and form the basis of this report and the site Biological Resources Map. Animals were identified using scat, tracks, burrows, vocalizations, or by direct observation with the aid of 10X42 Leica binoculars. Vegetation mapping was conducted in accordance with vegetation community definitions as described in Holland (1986) and Oberbauer (1996). In addition, vegetation mapping on-site was

aided by the use of a digital color satellite photograph. It should be noted that all vegetation community mapping is verified on the ground to the greatest degree possible in the absence of a systematic land survey. All vegetation areas and boundaries are estimates subject to final delineation by a licensed professional land surveyor.

Sensitive Species and Habitats

Prior to the site visit, a variety of sources are reviewed to ascertain the possible occurrence of sensitive species at the project site. First, soil types (Bowman 1973) are checked to determine if the site contains soils known to support sensitive plant species. Records searches for the USGS quadrangle and surrounding quads are done of the California Natural Diversity Data Base (CNDDB) and California Native Plant Society (CNPS) On-Line Inventory of Rare and Endangered Plants. Any sensitive species known to occur in the vicinity are given special attention, and available natural history information is reviewed. Seasonal occurrence patterns (*e.g.*, annual plants, migratory birds) are factored into survey plans in the event that site visits are made during time periods when certain species are not present or conspicuous. Information sources include the Jepson Manual (1993), Rare Plants of San Diego (Reiser 1994), A Flora of San Diego County, California (Beauchamp 1986), San Diego Native Plants (Lightner 2006), U.S. Fish and Wildlife Service Recovery Plans for Threatened/Endangered Species, the San Diego County Bird Atlas (Unitt 2004), and numerous other references, publications, and on-line resources. Typically, 15-20 field guides to various taxa are taken into the field for quick reference if necessary.

A list of sensitive species with potential to occur at the site is also reviewed prior to field work (See Appendix B). All species on the list are reviewed, and those species requiring directed or focused protocol surveys are noted and given appropriate attention.

In the field, potentially sensitive plants species not readily identified *in situ* are photographed and/or collected for identification via keys or other methods. For plant species still not identified, photographs and/or specimens are provided to knowledgeable botanists for identification.

During site visits, all habitats are assessed for their suitability for occupation by any sensitive species with potential to occur.

RESULTS[1]

Soils

Based on soil conservation service maps (Bowman 1973), the soil type for the project site is Fallbrook sandy loam, 15-30% slopes, eroded (FaE2). Although a detailed soil analysis is beyond the scope of this report, on-site examination appeared to verify this principal soil type.

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[1] Scientific and common names for plant species are derived from The Jepson Manual, 1993; scientific and common names for birds from the A.O.U. Check-list of North American Birds, 1998.

Habitats / Vegetation Communities (See Biological Resources Map)

Non-Native Grassland (Holland Code 42200)

The majority of the project site (9.51 acres) is occupied with Non-Native Grassland (Photographs 3 and 4). This area is apparently frequently cleared/mowed for fire abatement purposes. Typical invasive weedy grasses and forbs dominate, including species from the genera *Avena, Brassica, Bromus,* and *Hordeum.* A few widely scattered tree tobacco *Nicotiana glauca*, ornamental fan palm *Washingtonia mexicana*, laurel sumac *Malosma laurina*, and dying fruit trees occur within this area. Dove weed *Eremocarpus setigerus* also occurs in the area.

Southern Willow Scrub (Holland Code 63320 - 0.46 acres)

A narrow incised drainage that straddles the eastern property boundary contains vegetation assigned this vegetation community designation. However, as shown in Photographs 1 and 2, very little native vegetation occurs in the drainage. It is essentially overgrown with invasive Brazilian pepper *Schinus terebinthifolius* and ornamental fan palm trees. These noxious trees have crowded out and shaded out nearly all of the native wetland plant species. A few willow *Salix* sp. and coast live oak *Quercus agrifolia* trees survive. A few Chaparral/Sage Scrub species (*e.g.* flat-top buckwheat *Eriogonum fasciculatum*) persist on the steep, east facing slopes of the drainage, but not enough to constitute functional habitat. This entire area, including a biological buffer extending into the Non-Native Grassland, will be placed into a Biological Open Space easement. This area could also be classified as Non-Native Riparian (Holland Code 65000).

Orchards/ Vineyards (Holland Code 18100)

A narrow strip planted with well-maintained irrigated orange trees occurs along the northwest boundary of the parcel. The area amounts to 0.14 acres.

Wildlife

During the site survey common resident and migratory bird species were observed. These included Red-tailed Hawk *Buteo jamaicensis*, Anna's Hummingbird *Calypte anna*, Mourning Dove *Zenaida macroura*, Northern Mockingbird *Mimus polyglottos*, Lesser Goldfinch *Carduelis psaltria*, Say's Phoebe *Sayornis saya*, American Crow *Corvus brachyrhynchos* and Bushtit *Psaltriparus minimus.*

The only mammals recorded from the site were California Ground Squirrel *Spermophilus beecheyi* and Botta's Pocket Gopher *Thomomys bottae.* No reptiles or amphibians were recorded. Additional common animal species likely occur on-site.

Special Status Species

Focused surveys, directed surveys, and habitat assessments for species with potential to occur were conducted. In general, the site lacks appropriate habitat for most sensitive species. However, two species considered sensitive by the County of San Diego were detected. These are:

Red-shouldered Hawks *Buteo lineatus* are common and widespread residents and migrants in San Diego County, occurring in a wide variety of habitats including orchards and developed residential areas. Their population has increased dramatically in the last 100 years, and they are now extremely common in urban settings. It can be stated with a high degree of certainty that urbanization and agriculture have been beneficial for this species. One foraging individual was observed during site survey. Project development is unlikely to have any adverse impacts because this species has a high degree of adaptability to human-altered habitats and human disturbance, especially in Southern California (Bloom, *et. al.* 1993). This species is not included in the U.S. Fish and Wildlife Service's comprehensive list of Birds of Conservation Concern for the Southern California Bird Conservation Region (USFWS 2002).

Turkey Vultures *Cathartes aura* forage for carrion over a variety of habitats. They are common migrants and winter residents in San Diego County, and were a formerly more common breeding species. The site is likely occasionally used as foraging habitat for this species. However, impacts to this species are not anticipated. Turkey vultures are highly sensitive to disturbance at their nests. No suitable nesting habitat occurs on, near, or in the general vicinity of the project site. This species is not included in the U.S. Fish and Wildlife Service's comprehensive list of Birds of Conservation Concern for the Southern California Bird Conservation Region (USFWS 2002). No impacts to this species are anticipated.

Two additional species considered sensitive by the County of San Diego have a moderate potential for occurring on the site. These are:

Cooper's Hawks *Accipiter cooperi*, a state species of special concern, often forage in search of small birds over a variety of habitats. This urban-adapted species also occurs in oak woodlands and developed/residential areas. They are a common resident and migrant species in San Diego County. Although this species has apparently declined throughout much of California, there is no evidence for a breeding population decline in San Diego County. No Cooper's Hawks were seen during the site surveys, but their transient occurrence would not be surprising. The project would not adversely affect the species, thus no impacts are expected. This species is not included in the U.S. Fish and Wildlife Service's comprehensive list of Birds of Conservation Concern for the Southern California Bird Conservation Region (USFWS 2002).

Barn Owls *Tyto alba* are a cosmopolitan species and are a widespread resident in San Diego County. On the coastal slope they occur in agricultural, residential, grassland, riparian, oak woodland, and chaparral habitats (Unitt 2004). There is no scientific or other evidence to suggest that Barn Owls are declining or sensitive in San Diego County. Although they may occasionally occur on the project site, project implementation is unlikely to adversely affect their status. This species is not included in the U.S. Fish and Wildlife Service's comprehensive list of

Birds of Conservation Concern for the Southern California Bird Conservation Region (USFWS 2002). No impacts to this species are anticipated.

In addition to the species discussed above, the following discussion is provided regarding two butterfly species requiring directed surveys:

The **Quino Checkerspot Butterfly** *Euphydryas editha quino* was listed as an endangered species on January 16, 1997. The Quino is best thought of as a two-phase insect: the larvae (caterpillar) and the flying adult (butterfly). The larvae feed virtually exclusively on a small ephemeral annual plant - Dot-seed Plantain *Plantago erecta*. The Plantain competes poorly with other plants and tends, therefore, to be found on open soils, frequently on clays. A closed canopy of either shrubs or weedy annuals and perennials will preclude the Plantain from a location. In the laboratory, the larvae also feed on a small suite of plant species from the Monkey-flower family (*Scrophulariaceae*), but they have not been found on these plants in the wild (with one or two rare exceptions). The adult Quino can be found in association with the larval food plants - it is here that the adult hatches from its pupal case and it is here that the female lays her eggs. The species also exhibits a behavior known as "hilltopping." When they hatch from their pupa, adult males fly to the nearest hilltop (local topographic high point) where they patrol awaiting the arrival of female Quino. Mating occurs on these hilltops with the males then continuing their patrols and the females returning to the areas of larval food plants where they lay their eggs.

Given the life history outlined above, it can be logically concluded that a survey for the Quino Checkerspot Butterfly would also be in two phases: monitoring of stands of the food plant and monitoring hilltopping locations, both during the flight season of the butterfly (Fish and Wildlife Service Protocol, 2002).

A visit to the site was made on 16 July 2008 with David Faulkner, a professional entomologist and expert on Quino Checkerspot and Dun Skipper Butterflies. In his professional opinion the site is not suitable for use by Quino Checkerspot Butterflies based on the absence of suitable habitat and primary larval host plant species (Appendix C). Because of a lack of suitable habitat and the absence of the host plant, focused protocol surveys for this species on the project site are not recommended.

Harbison Dun Skipper *Euphys vestries harbisoni* is a distinctive Southern California subspecies of an otherwise widespread North American butterfly species. Harbison Dun Skippers are generally found in chaparral or riparian areas that have narrow canyons or narrow drainages. Oak riparian habitat seems to be the preferred location providing enough shade and sun for the butterfly to bask. The skipper is closely tied to its obligate host plant (where its eggs are laid), the San Diego Sedge *Carex spissa*. In the absence of the host plant, there is essentially no chance that the species will colonize a site. San Diego Sedge does not occur on the site. Because of a lack of suitable habitat and the apparent absence of the host plant, focused protocol surveys for this species on the project site are not recommended.

No other sensitive species are considered likely to occur on the project site.

Large mammals, such as mule deer *Odocoileus hemionus* and mountain lion *Felis concolor* prefer large unfragmented natural areas that offer extensive adequate forage or hunting opportunities as well as the opportunity for movement across long distances. Because the project site is situated within a highly developed, essentially urban area, these opportunities are very limited. As shown in Figures 6 and 7, the site is completely surrounded by extensive, long-established development. Opportunities for large mammal use and movement occur nearby in the San Pasqual Valley (along the San Dieguito River), and in the nearby 55,000 acre Rancho Guejito. The project site is generally unsuitable for use by large mammal species because of its small size and isolation from larger natural habitat areas.

OTHER UNIQUE FEATURES / RESOURCES

Wildlife Movement Corridors and Nursery Sites

A wildlife corridor can be defined as a linear landscape feature allowing animal movement between two larger patches of habitat. Connections between extensive areas of open space are integral to maintain regional biodiversity and population viability. In the absence of corridors, habitats become isolated islands surrounded by development. Fragmented habitats support significantly lower numbers of species and increase the likelihood of local extinction for select species when they are restricted to small isolated areas of habitat. Areas that serve as wildlife movement corridors are considered biologically sensitive.

Wildlife corridors can be defined in two categories: regional wildlife corridors and local corridors. Regional corridors link large sections of undeveloped land and serve to maintain genetic diversity among wide-ranging populations. Local corridors permit movement between smaller patches of habitat. These linkages effectively allow a series of small, connected patches to function as a larger block of habitat and perhaps result in the occurrence of higher species diversity or numbers of individuals than would otherwise occur in isolation. Target species for wildlife corridor assessment typically include species such as bobcat, mountain lion, and mule deer.

To assess the function and value of a particular site as a wildlife corridor, it is necessary to determine what areas of larger habitats it connects, and to examine the quality of the corridor as it passes through a variety of settings. High quality corridors connect extensive areas of native habitat, and are not degraded to the point where free movement of wildlife is significantly constrained. Typically, high quality corridors consist of an unbroken stretch of undisturbed native habitat.

The project site is surrounded on all sides by long-established residential development (See Figure 7). This TPM is essentially an urban infill project. Existing residential development on all sides effectively precludes wildlife movement to, from, or through the project site. The minor drainage feature that transects the eastern site boundary reaches its upper terminus at the northern site boundary. The drainage contains little native riparian vegetation, and virtually all vegetative cover south of the project site has been removed. Nevertheless, any wildlife

movement opportunities will be preserved by placement of this drainage into open space. As such, no significant impacts to wildlife movement corridors are anticipated.

Native Wildlife Nursery Sites

Native Wildlife Nursery Sites, which are considered sensitive resources that require protection, are defined in the County of San Diego Guidelines for Determining Significance - Biological Resources as "sites where wildlife concentrate for hatching and/or raising young, such as rookeries, spawning areas, and bat colonies". Features such as individual raptor or woodrat nests do constitute places where wildlife *concentrate*, thus they do not meet this definition and are therefore not considered Native Wildlife Nursery Sites. Any nesting raptors on the site will be protected by seasonal construction limitations. No Native Wildlife Nursery Sites occur on or near the project site, and none will be impacted by project implementation.

JURISDICTIONAL WETLANDS AND WATERWAYS

The County of San Diego requires that wetland surveys be completed using the wetlands definition within the County's Resource Protection Ordinance (RPO). This definition includes:

> All lands which are transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or where the land is covered by water. All lands having one or more of the following attributes are "wetlands":
>
> > a. At least periodically, the land supports predominantly hydrophytes (plants whose habitat is water or very wet places);
> >
> > b. The substratum is predominantly undrained hydric soil; or
> >
> > c. An ephemeral or perennial stream is present, whose substratum is predominately non-soil and such lands contribute substantially to the biological functions or values of wetlands in the drainage system.

Other pertinent definitions from the RPO include:

> Mature Riparian Woodland - A grouping of sycamores, cottonwoods and/or oak trees having substantial biological value, where at least ten of the trees have a diameter of six inches or greater.
>
> Riparian Habitat - An environment associated with the banks and other land adjacent to freshwater bodies, rivers, streams, creeks, estuaries, and surface-emergent aquifers (such as springs, seeps, and oases). Riparian habitat is characterized by plant and animal communities which require high soil moisture conditions maintained by transported freshwater in excess of that otherwise available through local precipitation.

It should also be noted that the County's definition of wetlands varies from the U.S. Army Corps of Engineers' (USACE) definition. The USACE frequently requires that formal or informal wetland delineations be conducted under guidelines set forth in the 1987 Corps of Engineers Wetland Delineation Manual. The USACE defines a wetland as "an area... inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." Typically, USACE wetlands are characterized by the presence of hydrophytic vegetation, hydric soils, and wetland hydrology.

In addition to regulating jurisdictional wetlands, Section 404 of the Clean Water Act (33 U.S.C. 1344) requires authorization for discharges of dredged or fill material into Waters of the United States. For non-tidal Waters of the U.S. the extent of jurisdiction is defined as the Ordinary High Water Mark, which is defined as: "the line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural lines impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation or presence of litter and debris."

Thus, an area determined to be a non-wetland may still be under USACE jurisdiction if certain criteria are met. To aid in identifying characteristics of Waters of the U.S., the USACE has prepared guidelines (USACE 2001) and a matrix detailing potential Waters of the U.S. based on apparent flow regimes, geomorphic features, and surface flow indicators. In addition, determination that a wetland or water body is a Waters of the United States also requires that the area in question is subject to interstate commerce. These criteria were considered as they apply to the project site.

California Department of Fish and Game Wetlands

Typically, the extent of CDFG wetlands is determined by the limits of riparian vegetation as it extends from a stream, creek, river, pond, lake, or other water feature. Often, CDFG and RPO wetlands have identical boundaries.

Although the drainage feature along the east site boundary contains a few scattered mulefat *Baccharis salicifolia* bushes and willow *Salix* sp. and oak *Quercus* sp. trees, the project site contains no features meeting any state or federal jurisdictional wetland criteria, the County RPO definition, or Waters of the United States.

PROJECT MSCP AND BMO COMPATIBILITY

The conversion of natural habitats in the unincorporated County of San Diego is currently regulated through Subarea Planning efforts in compliance with the NCCP process. The intent of these efforts is to retain large, connected areas of native vegetation in order to preserve habitat values and reduce the threat of endangerment to "covered" species through the retention of essential biotic variability and long term population viability. Because the County has adopted a Subarea Plan in compliance with the NCCP, development of the Redding project site is subject to regulation in conformance with the NCCP's Conservation Guidelines and the County's

Biological Mitigation Ordinance (BMO). This is because approval of the project would result in a significant loss of sensitive vegetation.

In order to approve the project, the County, as Lead Agency, must make determinations and publish certain necessary "Findings" of NCCP and BMO conformance for this project, based primarily on the data presented in this report. These "Findings" include legally-binding statements with respect to the following: (1) The project's consistency with the "Take Authorization" identified in the County's Section 10 (a) Recovery Permit and Habitat Conservation Plan (HCP); (2) Statements and quantification regarding the projects contribution to the regional "Take"; (3) Statements with respect to how approval of the project will not preclude connectivity between areas of high biological habitat values; (4) Statements with respect to how approval of the project is consistent with the Subregional NCCP for this area and the County's Subarea Plan; (5) Statements with respect to how approval of the project will minimize and mitigate to the maximum extent practicable impacts to habitat in accordance with Section 4.3 of the NCCP Guidelines; (6) Statements with respect to how approval of the project will not appreciably reduce the likelihood of the survival and recovery of the California Gnatcatcher or any of the other "covered" species in the wild, and; (7) Statements with respect to how approval of the project and the subsequent removal of habitat is incidental to otherwise lawful activities. The intent of these "Findings" is to ensure that the subject project will comply with the requirements of third-party beneficiary status afforded under the County's 10(a) permit under the federal Endangered Species Act.

Because the project supports Non-Native Grassland (a habitat type regarded as sensitive), the County of San Diego, functioning in a third-party permitting role must ensure that all of the requisite "Findings" are complete and accurate. The primary concern of the County and the Wildlife Agencies will be to ensure that not only will the minimal mitigation requirements for projects pursuant to the BMO be adhered to, but that any onsite preserve design be compatible with any applicable wildlife corridor function and long-term habitat viability.

SIGNIFICANCE OF PROJECT IMPACTS AND PROPOSED MITIGATION

The California Environmental Quality Act (CEQA) requires that projects avoid or adequately mitigate for the loss of sensitive species and habitats. Such avoidance or mitigation enables County staff to make a finding that all project impacts are below or will be reduced to a level below significant and to issue a Negative Declaration or Mitigated Negative Declaration for the proposed project.

Direct impacts occur when biological resources are altered or destroyed during the course of, or as a result of, project implementation. Examples of such impacts include removal or grading of vegetation, filling wetland habitats, or severing or physically restricting the width of wildlife corridors. Other direct impacts may include loss of foraging or nesting habitat and loss of individual species as a result of habitat clearing. Indirect impacts may include elevated levels of noise or lighting, change in surface water hydrology within a floodplain, and increased erosion or sedimentation. These types of indirect impacts can affect vegetation communities or their potential use by sensitive species. Permanent impacts may result in irreversible damage to

biological resources. Temporary impacts are interim changes in the local environment due to construction and would not extend beyond project-associated construction, including revegetation of temporarily disturbed areas adjacent to native habitats.

The CEQA Guidelines define "significant effect on the environment" as a "substantial, or potentially substantial adverse change in the environment." The CEQA Guidelines further indicate that there may be a significant effect on biological resources if the project will:

A. Substantially affect an endangered, rare or threatened species of animal or plant or the habitat of the species.

B. Interfere substantially with the movement of any resident or migratory fish or wildlife species to the extent that it adversely affects the population dynamics of the species.

C. Substantially diminish habitat for fish, wildlife, or plants.

The project as proposed will impact a sensitive vegetation community. A tabulation of project impacts is presented in Table 1.

Table 1. Existing, impacted, and preserved habitat on the project site.

VEGETATION COMMUNITY	ACREAGE ON-SITE	IMPACTED ACREAGE	MITIGATION RATIO	MITIGATION REQUIRED	PRESERVED ON-SITE	IMPACT NEUTRAL	OFF-SITE MITIGATION
Non-Native Grassland	9.51	9.51	0.5:1	4.76	0	0	4.76
Southern Willow Scrub	0.46	0	N / A	0	0.46	0	0
Orchards / Vineyards	0.14	N / A	N / A	N / A	N/ A	N / A	0
Total	10.11	9.51		4.76	0.46	0	4.76

No off-site impacts will result from implementation of the project as proposed.

Cumulative Impacts

Cumulative impacts consider the potential regional effects of a project and how a project may affect an ecosystem or one of its sensitive components beyond the project limits and on a regional scale. Section 15064 of the State CEQA Guidelines governs the determination of significant environmental impacts caused by a project. The evaluation of a project's cumulative impacts is discussed in Section 15064(h) of the CEQA Guidelines. Cumulative impacts must be discussed when project impacts, although individually limited, may be cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of

other current projects, and the effects of probable future projects affecting the same resource (CEQA Guidelines §15064(h)(1)).

A lead agency may determine in an initial study that "a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant". When a project might contribute to a significant cumulative impact, but the contribution will be rendered less than cumulatively considerable through mitigation measures set forth in a mitigated negative declaration, the initial study shall briefly indicate and explain how the contribution has been rendered less than "cumulatively considerable" (CEQA Guidelines §15064(h)(2)). The mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable (CEQA Guidelines §15064 (h)(4)).

To assess potential cumulative impacts for this project, several factors were considered. First, the project site is surrounded by an extensive area of existing low-density residential development. The site is not located within a proposed Pre-Approved Mitigation Area (PAMA), suggesting that in the regional context, it will not be an area slated for long-term preservation. Thus, take of sensitive upland habitat in the area (and required off-site mitigation) is likely to be supported as a means of funding and acquiring important tracts of habitat that will ultimately lead to assembly of a regional preserve system consisting of core habitat areas and the linkages that connect them, including habitat that can support candidate, sensitive, or special status species, none of which are found on the project site.

In the absence of adequate mitigation, the Redding project would have the potential to significantly degrade the quality of the environment. Other effects that would be considered cumulatively considerable would include substantial reduction the habitat of a fish or wildlife species that cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or significantly reduce the number or restrict the range of a rare or endangered plant or animal species. None of these other effects apply to the Redding project.

In addition, similar projects in the vicinity that have either been approved, are in process, or were in process but were withdrawn were examined to assess their actual or potential contributions to cumulative impacts. Projects within a radius of two miles were deemed sufficient for this analysis, because that area encompasses most of the projects sharing similar existing land uses and habitat types. The projects are:

TPM 20517 - Approved in 2002. This 17 acre parcel project resulted in the loss of 1.9 acres of Non-Native Grassland, but this loss was mitigated by the purchase of off-site credits, thus reducing the impacts to a level below significant.

TPM 20492 - Approved in 2005. This project resulted in the loss of 3.41 acres of Non-Native Grassland, but this loss was mitigated by the purchase of off-site credits, thus reducing the impacts to a level below significant.

TPM 20280 - Approved in 2002. This project was deemed by the County to have no direct or indirect impacts to sensitive resources, and no resulting contribution to cumulative impacts in the region.

TPM 20678 - Withdrawn in 2003. Because this project was withdrawn it will have no impacts and will not contribute to cumulative losses of sensitive habitat within the region.

TPM 20455 - Withdrawn in 2000. Because this project was withdrawn it will have no impacts and will not contribute to cumulative losses of sensitive habitat within the region.

TM 5162 - Withdrawn in 2001. Because this project was withdrawn it will have no impacts and will not contribute to cumulative losses of sensitive habitat within the region.

These projects, together with impacts from this project (TPM 21112), would result in losses of Non-Native Grassland in the study area of less than 16 acres. However, this is not considered cumulatively significant, because mitigation for these impacts will contribute to the preservation of biologically viable off-site habitat that can support candidate, sensitive, or special status species, none of which are found on the project site.

As stated, the project could result in cumulatively considerable impacts (in the absence of adequate mitigation). However, because all project impacts will be mitigated to a level that is "less than significant", the Redding project will not result in impacts that are cumulatively considerable.

Mitigation and Recommendations

Impacts to 9.51 acres of Non-Native Grassland (Tier III habitat) is considered significant and will require mitigation to reduce impacts to a level below significant. The project site is not located within a Pre-Approved Mitigation Area (PAMA) within the South County MSCP Sub-Area Plan, and does not qualify as a Biological Resources Core Area (BRCA). Based on this BMO designation, the County requires impacts to Non-Native Grassland to be mitigated at a 0.5:1 ratio. At this ratio a total of 4.76 acres of Non-Native Grassland will be conserved. Mitigation will be accomplished by the purchase off-site of suitable habitat within a County approved mitigation bank in the region. Not less than 4.76 will be conserved within a County approved mitigation bank within the MSCP area. A determination of where mitigation will occur will be made prior to final project approval.

Limitations on construction activities during the bird nesting season are recommended to reduce impacts to avian resources. If it is determined by a qualified biologist that no nesting is occurring within 300 feet (for passerine birds) or 500 feet (for raptors) of construction activity, such activities may proceed.

In order to prevent any adverse impacts to off-site resources, it is recommended that adequate measures (Best Management Practices) be taken during construction to prevent runoff

from entering drainages or other properties. These measures should be sufficient to reduce any possible indirect impacts of the proposed project to a level well below significant.

Impacts to sensitive biological resources will be mitigated to below a level of significance as defined by CEQA, and will be in conformance with the Biological Mitigation Ordinance and the County's Multiple Species Conservation Plan.

Thank you very much for the opportunity to conduct this work and prepare this report. Please contact me if I can provide any additional information or provide clarification.

Sincerely,

William T. Everett
Biological Consultant

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U.S. Geologic Survey. 1967. 1975 Photo Revised. Escondido Quadrangle 7.5 minute topographical map.

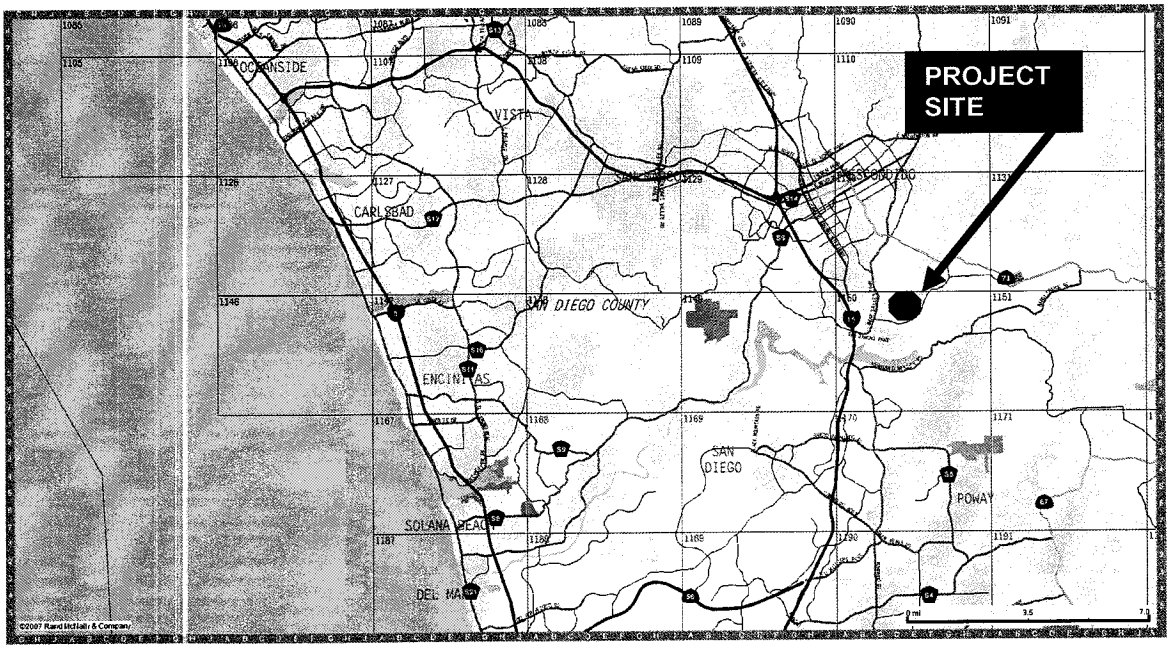


Figure 1. Location of project site in regional context. Thomas Bros. Map page #1150, D1.

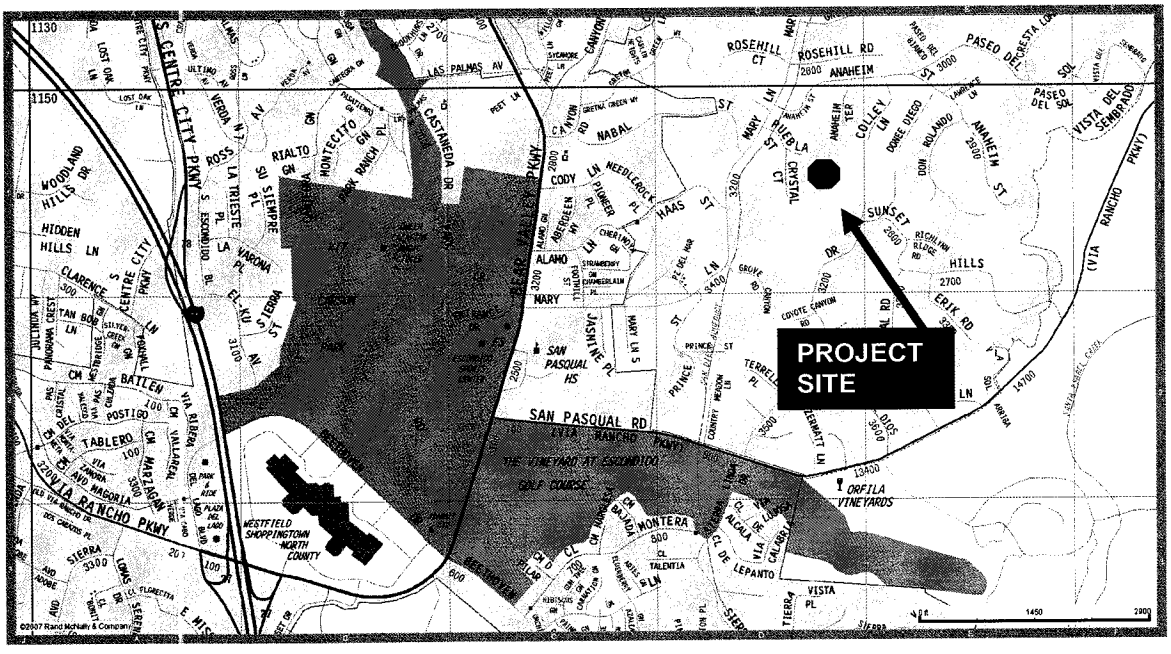


Figure 2. Detail location map of project site. Thomas Bros. Map page #1150, D1.

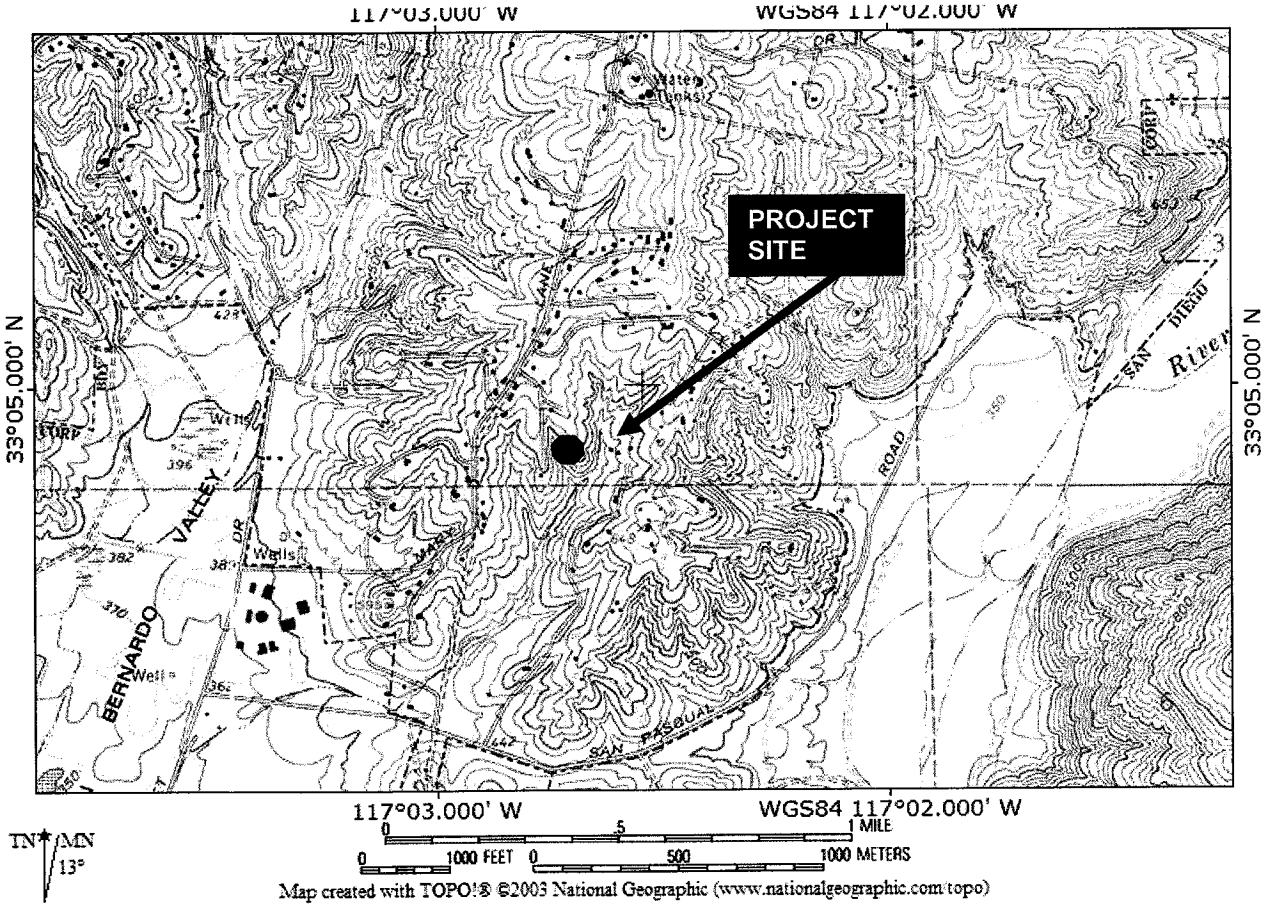


Figure 3. Topographical map showing project site location. Taken from USGS Escondido 7.5 minute series quadrangle.

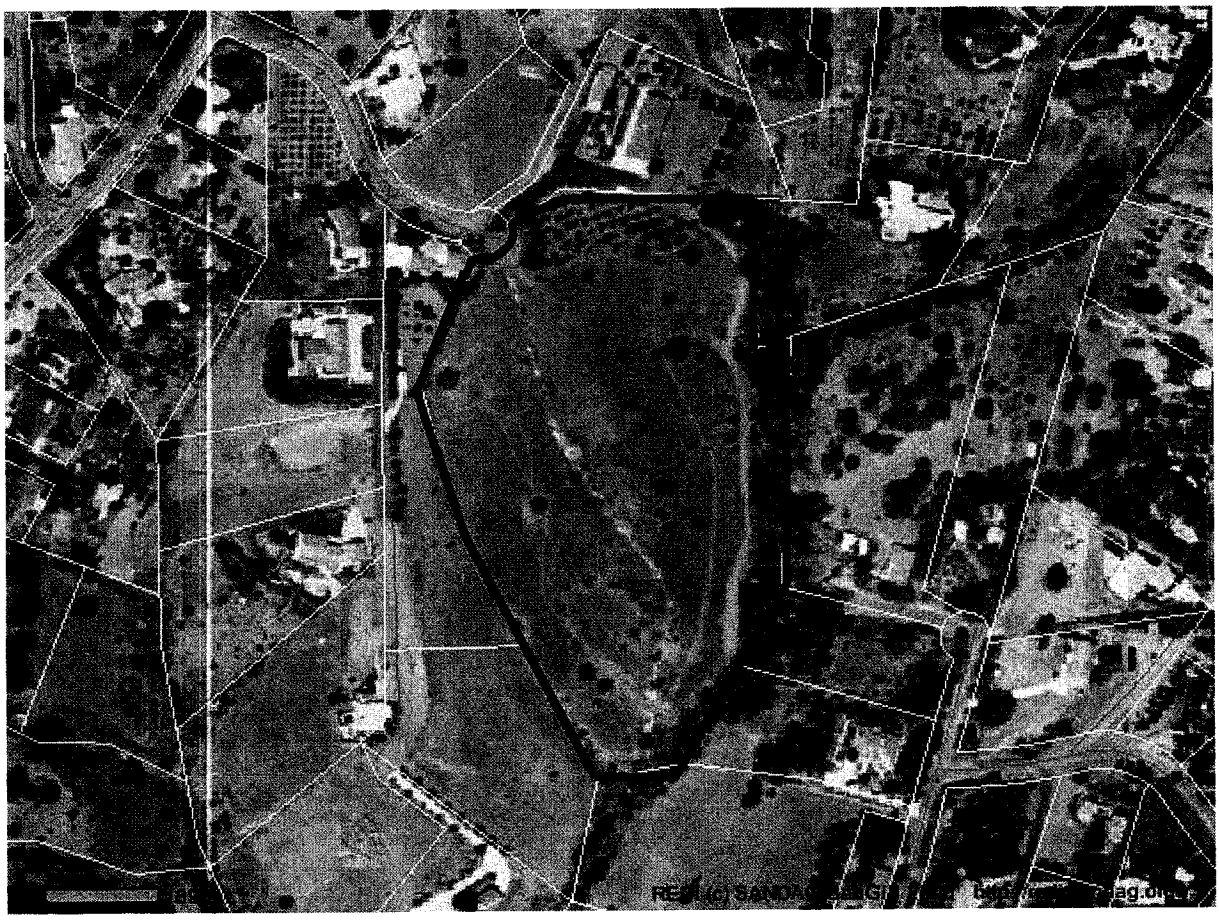


Figure 4. Satellite photograph of project site (photograph by SANDAG/SanGIS 2008), showing approximate boundaries for project (outlined in red, in center) and adjacent properties in yellow. Top of photo is true north.

Figure 5. Color satellite photograph of project site showing approximate boundaries for project. Top of photo is true north.

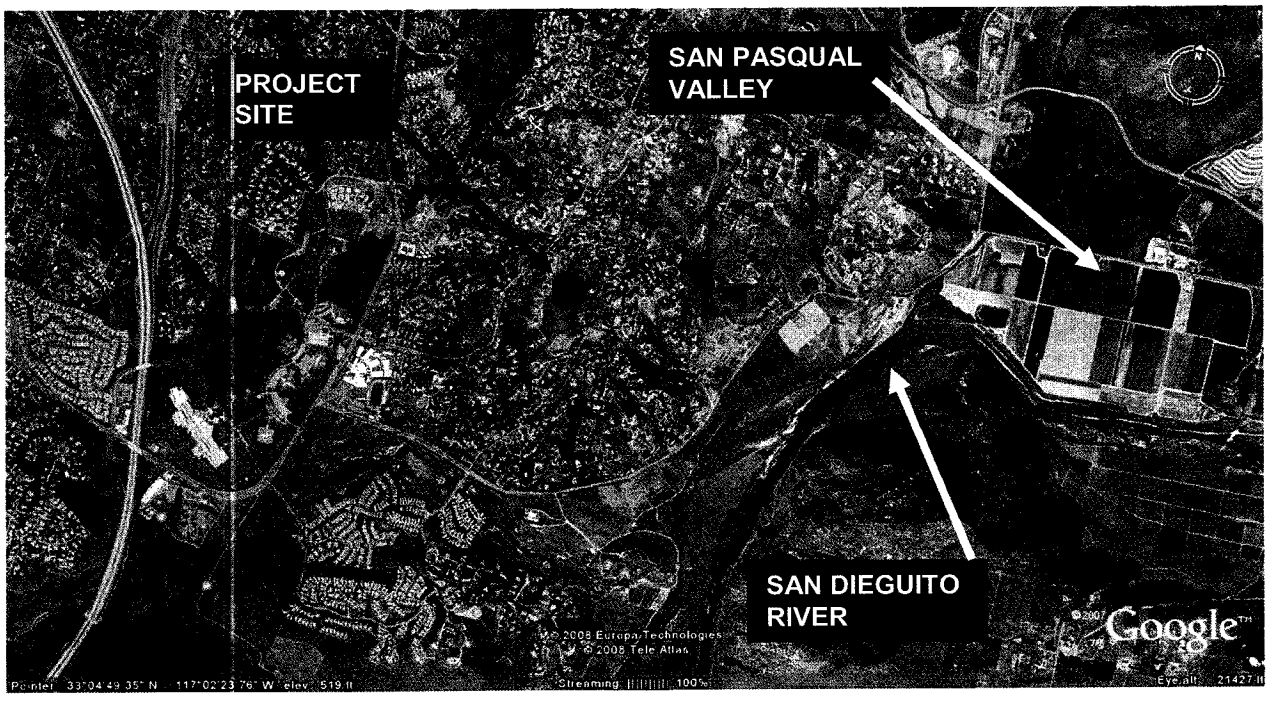


Figure 6. Vicinity of project site showing surrounding area and nearby wildlife movement areas.

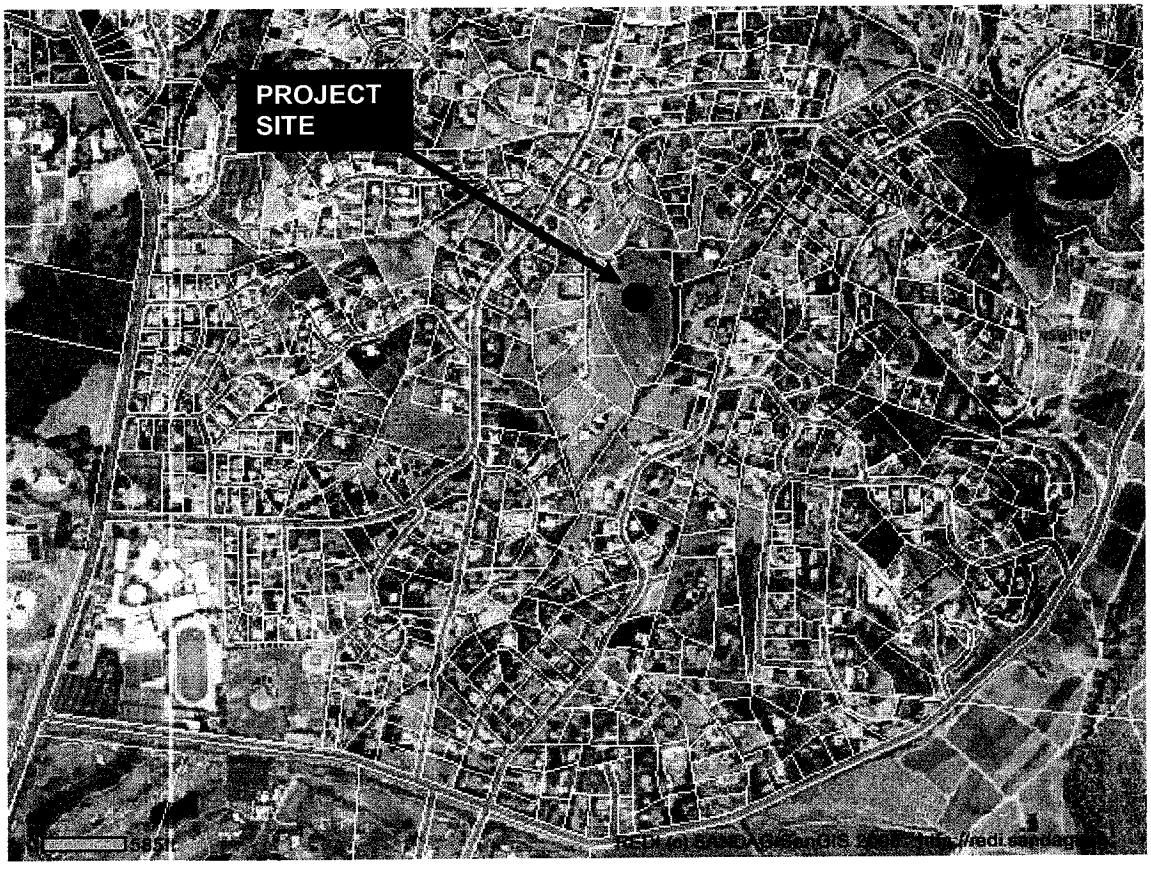


Figure 7. Vicinity of project site showing density of existing development in the area.

APPENDIX A

PHOTOGRAPHS OF THE PROJECT SITE

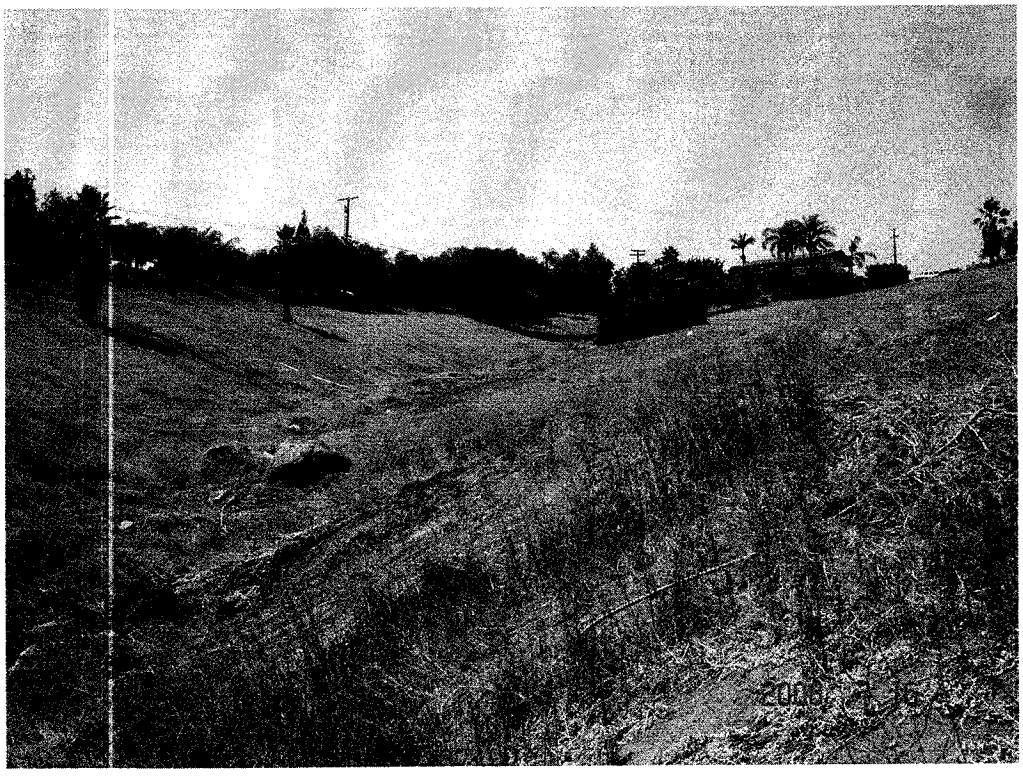
All photographs taken 2008 by W.T. Everett

PHOTOGRAPH INDEX

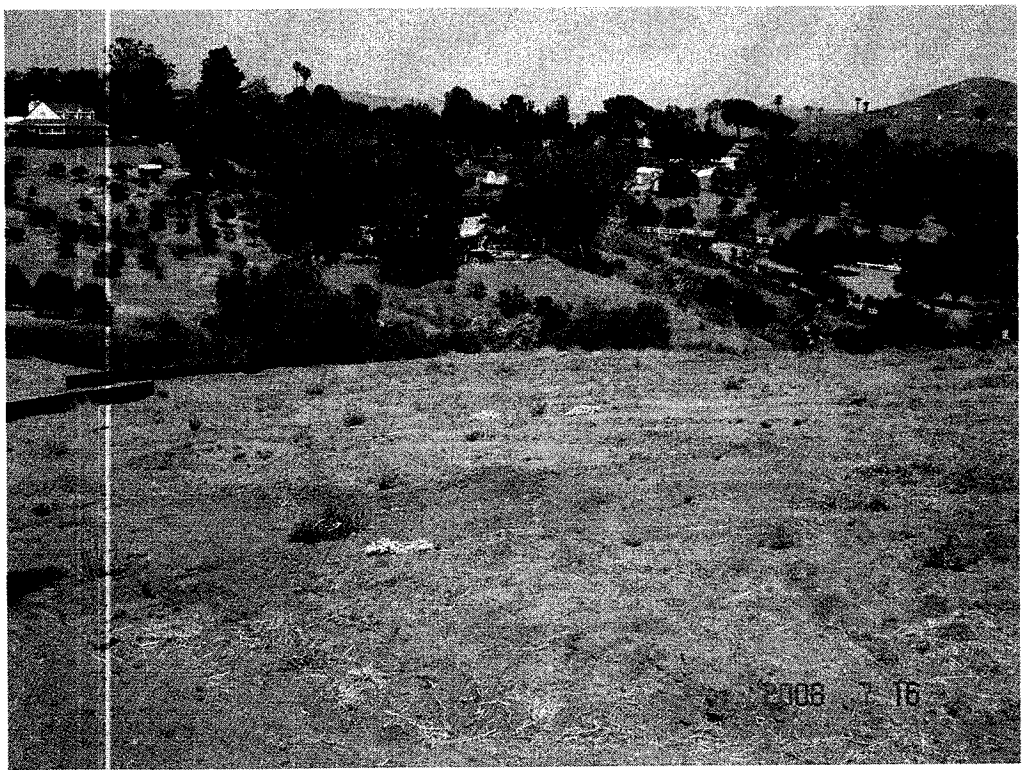
Yellow arrows and numbers indicate the locations and directions from which the following photographs were taken:

Photograph 1. View of the drainage along the east parcel boundary, looking south.

Photograph 2. View of the drainage along the east parcel boundary, looking north.



Photograph 3. View of the west side of the parcel, looking northwest.



Photograph 4. View looking across the north end of the project site, looking north.

APPENDIX B

COUNTY LIST OF SENSITIVE SPECIES WITH POTENTIAL TO OCCUR ON THE PROJECT SITE

Legend

Status

1 = Federally Endangered
2 = Federally Threatened
3 = State Endangered
4 = State Threatened
5 = State Rare
6 = MSCP Narrow Endemic
7 = Not Listed
8 = County Sensitive Plant List Designation (A-D)
Ext = Extirpated

Potential to Occur On-site

Note: Species shown in **bold** are those for which Directed Surveys were conducted

L = Low
M = Moderate
H = High
U = Unknown (Sufficient data are not available on the status, distribution, abundance, or natural history of the species to make a reliable determination of the probability of occurring on-site)

Rationale

1 = Would likely have been detected during directed surveys if present
2 = Appropriate suitable habitat not present on-site
3 = Insufficient natural history information is available to determine if presence is likely

Common Name	Scientific Name	Status	Observed On-Site (Y or N)	Potential to Occur On-site	Habitat Preferences
Ambrosia pumila	**San Diego ambrosia**	**1, 6, 8A**	**N**	**L - 2**	**Coastal Sage Scrub, Grassland, Riparian, Vernal Pools**

Acanthomintha ilicifolia	**San Diego thornmint**	**2, 3**	**N**	**L - 2**	**Coastal Sage Scrub, Grassland, Chamise Chaparral, Vernal Pools**
Achnatherum diegoensis	San Diego needlegrass	7, 8A	N	L - 2	Coastal Sage Scrub, Grassland
Artemesia palmeri	Palmer's sage	7, 8B	N	L - 2	Coastal Sage Scrub, Riparian
Brodiaea orcutti	**Orcutt's brodiaea**	**7, 8A**	**N**	**L - 2**	**Grassland, Riparian, Oak Woodland, Chamise Chaparral, Vernal Pools**
Centromadia pungens laevis	**Smooth tarplant**	**7, 8A**	**N**	**L- 2**	**Grassland**
Holocarpha virgata elongate	Graceful tarplant	7, 8D	N	L - 2	Grassland
Juncus acutus leopoldii	Southwestern spiny rush	7, 8D	N	L - 2	Riparian, Oak Woodland, Freshwater Marsh,
Lepidium virginicum robinsonii	**Robinson pepper grass**	**7, 8A**	**N**	**L - 2**	**Grassland**
Muilla clevelandii	**San Diego goldenstar**	**7, 8A**	**N**	**L - 2**	**Coastal Sage Scrub, Riparian, Chamise Chaparral**
Danaus plexippus	Monarch butterfly	7	N	L - 2	Grassland, Oak Woodland, Montane Meadow
Euphydryas editha quino	**Quino checkerspot butterfly**	**1**	**N**	**L - 2**	**Coastal Sage Scrub, Grassland, Chamise Chaparral, Desert Scrub, Vernal Pools**
Euphys vestries harbisoni	**Dun skipper**	**6**	**N**	**L - 2**	**Mixed Chaparral, Riparian, Oak Woodland, Freshwater Marsh**
Clemmys marmorata pallida	**Southwestern pond turtle**	**6**	**N**	**L- 2**	**Riparian, Freshwater Marsh, Lakes and Bays**

Rana aurora draytoni	**California red-legged frog**	**2, 6**	**N**	**L - 2**	**Riparian, Freshwater Marsh, Montane Meadow, Lakes and Bays**
Scaphiopus hammondii	Western spadefoot toad	7	N	L - 2	Coastal Sage Scrub, Mixed Chaparral, Grassland, Riparian, Oak Woodland, Chamise Chaparral, Freshwater Marsh, Vernal Pools
Coleonyx variegates blainvillei	**San Diego banded gecko**	**7**	**N**	**L - 2**	**Riparian, Freshwater Marsh, Montane Meadow, Lakes and Bays**
Phrynosoma coronatum blainvillei	San Diego horned lizard	7	N	L - 2	Coastal Sage Scrub, Mixed Chaparral, Grassland, Riparian, Chamise Chaparral, Mixed Conifer
Cnemidophorus hyperythrus	**Orange-throated whiptail**	**7**	**N**	**L - 2**	**Coastal Sage Scrub, Mixed Chaparral, Grassland, Riparian, Chamise Chaparral**
Cnemidophorus tigris multiscutatis	Coastal western whiptail	7	N	L - 2	Mixed Chaparral, Riparian, Oak Woodland, Chamise Chaparral
Anniella pulchra pulchra	Silvery legless lizard	7	N	L - 2	Coastal Sage Scrub, Grassland, Riparian, Coastal or Desert Dune

Eumeces skiltonianius interparietalis	Coronado skink	7	N	L - 2	Coastal Sage Scrub, Grassland, Riparian, Oak Woodland, Chamise Chaparral, Mixed Conifer, Closed Cone Forest, Pinon-Juniper, Freshwater Marsh
Diadophis punctatus similis	San Diego ringneck snake	7	N	L - 2	Coastal Sage Scrub, Mixed Chaparral, Riparian, Oak Woodland, Chamise Chaparral, Mixed Conifer, Closed Cone Forest
Thamnophis sirtalis ssp. novum	South Coast garter snake	7	N	L - 2	Riparian, Freshwater Marsh
Thamnophis hammondii	**Two stripe garter snake**	**7**	**N**	**L - 2**	**Riparian, Freshwater Marsh**
Euderma maculatum	Spotted bat	7	N	U - 3	Riparian, Mixed Conifer, Closed Cone Forest, Pinon Juniper, Desert Wash, Montane Meadow
Myotis yumanensis	Yuma myotis	7	N	U - 3	Coastal Sage Scrub, Mixed Chaparral, Grassland, Riparian, Oak Woodland, Chamise Chaparral, Mixed Conifer, Closed Cone Forest, Pinon-Juniper, Freshwater Marsh, Salt or Alkali Marsh, Vernal Pools, Montane Meadow, Lakes and Bays

Myotis ciliolabrum	Small-footed myotis	7	N	L - 2	Mixed Chaparral, Riparian, Oak Woodland, Chamise Chaparral, Mixed Conifer, Closed Cone Forest, Pinon-Juniper, Desert Wash, Montane Meadow
Corynorhinus townsendii	Townsend's big-eared bat	7	N	L - 2	Mixed Chaparral, Grassland, Riparian, Oak Woodland, Chamise Chaparral, Mixed Conifer, Closed Cone Forest, Pinon-Juniper, Desert Scrub, Desert Wash, Montane Meadow
Antrozous pallidus	Pallid bat	7	N	U - 3	Coastal Sage Scrub, Mixed Chaparral, Grassland, Riparian, Oak Woodland, Chamise Chaparral, Mixed Conifer, Closed Cone Forest, Pinon-Juniper, Desert Scrub, Desert Wash, Montane Meadow
Lasiurus blossevillii	Western red bat	7	N	U - 2	Riparian, Oak Woodland, Mixed Conifer, Closed Cone Forest, Montane Meadow

Nyctinomops femorosaccus	Pocketed free-tailed bat	7	N	U - 3	Coastal Sage Scrub, Mixed Chaparral, Grassland, Riparian, Oak Woodland, Chamise Chaparral, Mixed Conifer, Closed Cone Forest, Pinon-Juniper, Freshwater Marsh, Desert Scrub, Desert Wash, Salt or Alkali Marsh, Vernal Pools, Montane Meadow, Lakes and Bays
Nyctinomops macrotis	Big free-tailed bat	7	N	U - 3	Coastal Sage Scrub, Mixed Chaparral, Grassland, Riparian, Oak Woodland, Chamise Chaparral, Mixed Conifer, Closed Cone Forest, Pinon-Juniper, Freshwater Marsh, Desert Scrub, Desert Wash, Salt or Alkali Marsh, Vernal Pools, Montane Meadow, Lakes and Bays

Eumops perotis californicus	Greater western mastiff bat	7	N	L - 3	Coastal Sage Scrub, Mixed Chaparral, Grassland, Riparian, Oak Woodland, Chamise Chaparral, Mixed Conifer, Closed Cone Forest, Pinon-Juniper, Freshwater Marsh, Desert Scrub, Desert Wash, Salt or Alkali Marsh, Vernal Pools, Montane Meadow, Lakes and Bays
Lepus californicus bennettii	San Diego black-tailed jackrabbit	7	N	L - 2	Coastal Sage Scrub, Mixed Chaparral, Grassland, Oak Woodland, Chamise Chaparral, Mixed Conifer, Closed Cone Forest
Chaetodipus californicus femoralis	Dulzura California pocket mouse	7	N	L - 2	Coastal Sage Scrub, Mixed Chaparral, Grassland, Oak Woodland, Chamise Chaparral, Mixed Conifer
Chaetodipus fallax fallax	Northwestern San Diego pocket mouse	7	N	L - 2	Coastal Sage Scrub, Mixed Chaparral, Grassland, Chamise Chaparral, Desert Scrub, Desert Wash
Onychomys torridus Ramona	Southern grasshopper mouse	7	N	L - 2	Coastal Sage Scrub, Mixed Chaparral, Grassland, Chamise
Neotoma lepida intermedia	San Diego desert woodrat	7	N	L - 2	Coastal Sage Scrub, Riparian, Oak Woodland, Chamise Chaparral

Odocoileus hemionus	Southern mule deer	7	N	L -2	Coastal Sage Scrub, Mixed Chaparral, Grassland, Riparian, Oak Woodland, Chamise Chaparral, Mixed Conifer, Closed Cone Forest, Pinon-Juniper, Desert Scrub, Desert Wash, Montane Meadow
Taxidea taxus	American badger	7	N	L - 2	Coastal Sage Scrub, Mixed Chaparral, Grassland, Oak Woodland, Chamise Chaparral, Mixed Conifer, Pinon-Juniper, Desert Scrub, Desert Wash, Montane Meadow
Bassariscus astutus	Ringtail	7	N	L - 2	Mixed Chaparral, Chamise Chaparral
Felis concolor	Mountain lion	7	N	L - 2	Coastal Sage Scrub, Mixed Chaparral, Riparian, Oak Woodland, Chamise Chaparral, Mixed Conifer, Closed Cone Forest, Pinon-Juniper, Desert Scrub, Desert Wash, Montane Meadow
Ardea herodias	Great Blue Heron	7	N	L - 2	Grassland, Freshwater Marsh, Lakes and Bays
Buteo lineatus	**Red-shouldered Hawk**	**7**	**Y**	**H**	**Riparian, Oak Woodland**
Elanus caeruleus	**Black-shouldered Kite**	**7**	**N**	**L - 2**	**Grassland, Riparian**
Accipiter cooperi	**Cooper's Hawk**	**7**	**N**	**M**	**Grassland, Riparian, Oak Woodland**

Aquila chrysaetos	**Golden Eagle**	**6**	**N**	**L - 2**	**Coastal Sage Scrub, Mixed Chaparral, Grassland, Oak Woodland, Chamise Chaparral, Mixed Conifer, Closed Cone Forest, Pinon-Juniper**
Circus cyaneus hudsonius	**Northern Harrier**	**7**	**N**	**L - 2**	**Grassland, Freshwater Marsh, Salt or Alkali Marsh**
Falco mexicanus	**Prairie Falcon**	**7**	**N**	**L - 2**	**Desert Scrub, Desert Wash**
Cathartes aura	**Turkey Vulture**	**7**	**Y**	**H**	**Coastal Sage Scrub, Mixed Chaparral, Grassland, Riparian, Oak Woodland, Chamise Chaparral, Mixed Conifer, Closed Cone Forest**
Accipter striatus	**Sharp-shinned Hawk**	**7**	**N**	**L - 2**	**Coastal Sage Scrub, Oak Woodland, Mixed Conifer**
Asio otus	**Long-eared Owl**	**7**	**N**	**L - 2**	**Riparian, Desert Wash**
Athene cunicularia hypugea	**Burrowing Owl**	**7**	**N**	**L - 2**	**Coastal Sage Scrub, Grassland, Desert Wash, Coastal or Desert Dune**
Tyto alba	Common Barn Owl	7	N	M	Riparian, Oak Woodland
Larus californicus bennettii	California Gull (Non-breeding)	7	N	L - 2	Not Specified

Lanius ludovicianus	**Loggerhead Shrike**	**7**	**N**	**L - 2**	**Coastal Sage Scrub, Grassland, Riparian, Oak Woodland, Desert Scrub, Desert Wash**
Vireo bellii pusillus	**Least Bell's Vireo**	**1, 3**	**N**	**L - 2**	**Riparian**
Coccyzus americanus occidentalis	**Yellow-billed Cuckoo**	**4**	**N**	**L - 2**	**Riparian**
Empidonax trailii extimus	**Southwestern Willow Flycatcher**	**1**	**N**	**L - 2**	**Riparian**
Sialia mexicana	Western Bluebird	7	N	L - 1	Riparian, Oak Woodland
Ictera virens	**Yellow-breasted Chat**	**6,7**	**N**	**L - 2**	**Riparian**
Dendroica petechia brewersti	Yellow Warbler	7	N	L - 2	Riparian
Eremophila alpestris actis	Horned Lark	7	N	L - 2	Grassland, Montane Meadow
Ammodramus savannarum	**Grasshopper Sparrow**	**7**	**N**	**L - 2**	**Grassland**

APPENDIX C

HABITAT ASSESSMENT FOR QUINO CHECKERSPOT AND DUN SKIPPER BUTTERFLIES

FORENSIC ENTOMOLOGY SERVICES

5434 Redland Place
San Diego, California 92115-2217
Phone/Fax 619.583.0180
[redacted]
Email: Dkfaulkner41@cox.net

18 September 2008

William T. Everett
Everett and Associates
Environmental Consultants
Post Office Box 1085
La Jolla, California 92038

RE: Redding Project, TPM 21112, Escondido
Site Assessment for Quino Checkerspot Butterfly/Dun Skipper

Ms Redding:

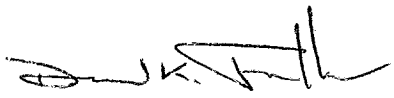
I was shown the property in July by William T. Everett to assess potential habitat for both Harbison's Dun Skipper (*Euphyes vestris harbisoni*), and the federally endangered Quino Checkerspot Butterfly (*Euphydryas editha quino*). Time was spent walking the entire site to establish the presence or absence in the habitat of vegetation and other factors required to support populations of these two species. Although the annual adult flight seasons were over for both species, the area could still provide evidence of any larval host plants or adult nectar sources.

Harbison's Dun Skipper. This species occurs in San Diego County in seeps and riparian habitats that contain the only known larval host, San Diego Sedge (*Carex spissa*). Although there are two areas that act as drainages on the property, there is no evidence of this sedge species. Although adult Dun Skippers can disperse along drainages while nectaring on a variety of flowers, they can not establish colonies without the larval host plant. There are records for this species in San Pasqual Valley, but none for this area of Escondido.

Quino Checkerspot Butterfly. There is no evidence of any primary or secondary larval host plants that would support colonies of this listed species on the site. Most of the property contains open, disturbed soils with numerous weedy plants. There are adequate adult butterfly nectar sources, especially California Buckwheat (*Eriogonum fasciculatum*), and numerous annuals would also provide resources. However, without larval host plants, Quino Checkerspot Butterflies could not establish. The closest records for this butterfly is near Sycamore Canyon and San Vicente Lake. There are no current records for Escondido.

There is currently no evidence on the property that either butterfly species is resident or could establish populations in the future. The primary reason is the total absence of larval host plants on the site. Other factors, such as permanent water, graded soils,

introduced weedy vegetation, and the isolated location of the property away from known colonies of these insect species, would also limit their access and utilization of any available resources. Owing to the condition of the site, I would not recommend any future protocol surveys for the Quino Checkerspot Butterfly or general surveys for Harbison's Dun Skipper.



David K. Faulkner
Entomologist
USFWS Permit #TE-838743-5

APPENDIX D

PREPARER QUALIFICATIONS

William T. Everett is a research, consulting, and conservation biologist with more than 30 years experience in the San Diego environment and around the world. He has logged more than 12,000 hours of field work, all detailed with field notes. In the 1970's Bill apprenticed in the study of chaparral ecology under Frank Gander, the retired but renown premier California botanist of the 1930s and 40s. Although his specialty is ornithology, Bill has a long-standing interest in all endangered species management and conservation issues. As President then Conservation Chairman of the San Diego Chapter of the Audubon Society in the late 1970s, he gained a keen understanding of the conservation challenges facing a growing Southern California. He subsequently became one of the first Biological Consultants certified by the County of San Diego in the 1980s. Bill is a Fellow of the National Association of Environmental Professionals (NAEP) and subscribes to the NAEP Code of Ethics and Standards of Practice for Environmental Professionals.

Bill Everett has published numerous scientific articles and conducted research in Southern California, Alaska, Baja California, South America, and throughout the tropical Pacific Ocean. In 1977, in recognition of his accomplishments, he was appointed as a Research Associate of the Department of Birds and Mammals of the San Diego Natural History Museum, a position he holds to this day. In 1990 he was elected as a Research Fellow of the Zoological Society of San Diego, and in 1988 was appointed as the Senior Conservation Biologist of the Western Foundation of Vertebrate Zoology. The Royal Geographic Society of London elected Bill as a Fellow in 1996, following his election as a Fellow of the Explorers Club in 1990.

Hired as a biologist for the U.S. Fish and Wildlife Service in 1977, Bill conducted research on endangered Peregrine Falcons in Northern California at a time when their continued existence was questionable. His interest in threatened species led to publication by the Audubon Society in 1979 of his paper entitled "Threatened, Declining and Sensitive Bird Species in San Diego County" (Sketches 36:1-2). This paper contained the first published account of the decline of the California Gnatcatcher.

Beyond the Southern California area, Bill has prepared the seabird impacts sections for the Draft and Final Environmental Impact Statements for Hawaii-based Pelagic Fisheries of the Western Tropical Pacific Ocean (2001), received a National Science Foundation major grant to lead an International Biocomplexity Survey and Expedition to Isla Guadalupe, Baja California,

Mexico (2000), led the effort to save North America's most endangered bird species, the San Clemente Loggerhead Shrike (1991-1997), and currently heads up efforts to restore bird populations on Wake Atoll and Christmas Island in the central Pacific.

Bill holds a U.S. Fish and Wildlife Master Bird Banding Permit (#22378) with Endangered Species Authorization, and California Gnatcatcher Survey Authorization Permit # TE-788036. He received his Masters Degree from the University of San Diego in 1991, and completed a Post-Graduate Program at Harvard University's John F. Kennedy School of Government in 1997.

Bill has served as a member of the Conservation and Research Committee of the Zoological Society of San Diego since the committee was first established. In 1990, he founded the Endangered Species Recovery Council (www.esrc.org), an international organization of scientists and conservationists dedicated to finding solutions to the problem of species extinctions. He continues as President of the organization.

In May 2002 Bill was honored in New York as a first recipient of the Explorers Club "Champions of Wildlife" award.